

What is claimed is:

1. A lead assembly comprising:
 - an outer insulative body;
 - at least one conductor disposed within the outer insulative body, the at least one conductor extending from a conductor proximal end to a conductor distal end;
 - an inner electrode coupled with the at least one conductor, the at least one conductor welded to the inner electrode, the inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface and inner electrode end surfaces; and
 - an outer electrode disposed over the inner electrode, the outer electrode coupled with at least a portion of the inner electrode outer surface.
2. The lead assembly as recited in claim 1, wherein the inner electrode outer surface includes a stepped portion having a ledge, and the conductor is disposed on the ledge.
3. The lead assembly as recited in claim 1, wherein the inner electrode and the outer electrode are welded together.
4. The lead assembly as recited in claim 1, wherein a portion of the conductor is disposed between the inner electrode outer surface and the outer electrode.
5. The lead assembly as recited in claim 4, wherein the at least one conductor extends to a distal end, and the distal end is disposed between the inner electrode outer surface and the outer electrode.
6. The lead assembly as recited in claim 1, wherein at least one of the inner electrode outer surface or the outer electrode inner surface include insulation disruption features.

7. A lead assembly comprising:
an outer insulative body;
at least one conductor disposed within the outer insulative body, the at least one conductor extending from a conductor proximal end to a conductor distal end;
an inner electrode coupled with the at least one conductor, the inner electrode defined in part by an inner electrode inner surface, an inner electrode outer surface and inner electrode end surfaces;
an outer electrode disposed over the inner electrode, the outer electrode having a treated outer surface; and
means for electrically and mechanically coupling the outer electrode with the inner electrode without substantially damaging the treated outer surface of the outer electrode.
8. The lead assembly as recited in claim 7, wherein the means for electrically and mechanically coupling the outer electrode with the inner electrode includes a laser welded coupling formed between the inner electrode and the outer electrode.
9. The lead assembly as recited in claim 7, wherein the means for electrically and mechanically coupling the outer electrode with the inner electrode includes a magnetic swage coupling.
10. The lead assembly as recited in claim 7, wherein at least a portion of at least one of the inner electrode and the outer electrode are formed of shape memory material.
11. The lead assembly as recited in claim 7, wherein the conductor is disposed between the outer electrode and the inner electrode, and the outer electrode, the conductor, and the inner electrode are coupled together at substantially the same time.

12. The lead assembly as recited in claim 7, further comprising means for disrupting insulation disposed between the inner and outer electrode.
13. A method comprising:
coupling a conductor with an inner electrode to form a conductor-inner electrode coupling,
inspecting the coupling between the inner electrode and the conductor;
coupling an outer electrode with the inner electrode after the inspecting the conductor-inner electrode coupling between the inner electrode and the conductor;
and
disposing insulative tubing over the conductor.
14. The method as recited in claim 13, wherein coupling the conductor with the inner electrode includes laser welding the conductor to the inner electrode.
15. The method as recited in claim 13, wherein coupling the inner electrode with the outer electrode includes laser welding the outer electrode to a central section of the inner electrode.
16. The method as recited in claim 13, wherein coupling the conductor with the inner electrode includes coupling the conductor with a ledge on an outer surface of the inner electrode.
17. The method as recited in claim 13, wherein disposing insulative tubing over the conductor occurs prior to coupling the outer electrode with the inner electrode.

18. A method comprising:
disposing a conductor over at least a portion of an inner electrode;
disposing an outer electrode over the inner electrode and the conductor, the outer electrode having an outer surface;
coupling the inner electrode, the conductor, and the outer electrode without directly contacting the outer surface of the outer electrode; and
disposing insulative tubing over at least a portion of the conductor, and the inner electrode.
19. The method as recited in claim 18, wherein coupling at least one of the inner electrode or the conductor with the outer electrode includes magnetic flux swaging the outer electrode, the conductor and the inner electrode together.
20. The method as recited in claim 18, wherein coupling the inner electrode, the conductor, and the outer electrode together includes resistance welding the outer electrode, the conductor and the inner electrode.
21. The method as recited in claim 18, further comprising interlocking the outer electrode with the inner electrode with interlocking features disposed therebetween.
22. The method as recited in claim 18, wherein coupling the outer electrode, the inner electrode, and the conductor includes forming at least a portion of the outer electrode with shape memory material, and contracting the outer electrode.
23. The method as recited in claim 22, wherein contracting the outer electrode includes contracting an outer surface of the outer electrode.
24. The method as recited in claim 22, wherein contracting the outer electrode includes contracting an inner surface of the outer electrode.

25. The method as recited in claim 18, further comprising disrupting insulation of the conductor with features formed along a portion of the inner electrode or the outer electrode.